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REMARKS

Reconsideration of the instant application is respectfully requested. The present submission is responsive to the Office Action of June 15, 2004, in which claims 1-25 were previously pending. Of those, claims 21-25 have been withdrawn as being directed toward a non-elected invention.

Of the remaining claims under consideration, claims 1-4, 6-7, 10, 11-14, 16-17 and 20 have been rejected under 35 U.S.C. §103(a), as being unpatentable over U.S. Patent 6,426,254 to Kudelka, et al. In addition, Claims 5, 8-9, 15 and 18-19 are rejected under 35 U.S.C. §103(a), as being unpatentable over Kudelka, in view of the publication of S. Wolf and R. N. Tauber, "*Silicon Processing for the VLSI Era*", Vol. 1, pp.307-308, 323-324. For the following reasons, however, it is respectfully submitted that the application is in condition for allowance.

Claims 1 and 11 have been amended as indicated above to more particularly point out that the upper portion of the deep trench is shaped to a generally rectangular portion without shaping the lower portion of the trench. Support for this amendment is found at least at paragraph [0025] of the electronically specification, and in Figure 11.

In contrast, a review of the Kudelka reference reveals that in all embodiments disclosed therein, the lower portion of the trench is always reshaped. This is consistent with the stated objectives of increasing the surface area of the deep trench below the insulating collar to increase the capacitance of the trench (col. 1, lines 19-21, lines 43-44).


Thus, even if one skilled in the art would be motivated to expand the teachings of Kudelka to also shape an upper portion of a deep trench to a rectangular configuration, this would be done in addition to shaping the lower portion of the trench. Accordingly, such a modification of the teachings of Kudelka would still not result in the invention of the claims as amended herein.

For the above stated reasons, it is respectfully submitted that the present application is now in condition for allowance. No new matter has been entered and no additional fees are believed to be required. However, if any fees are due with respect to this Amendment, please charge them to Deposit Account No. 06-1130 maintained by Applicants' attorneys.

Respectfully submitted,  
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